

CLAIMS:

1. An information transmission method, whereby information from a source terminal, one of multiple terminals, is relayed and forwarded by another terminal, comprising the steps of:

calculating an information progress vector that represents the progress of information;

calculating a terminal progress vector that represents the travel performed by a specific terminal among said multiple terminals;

calculating cosine ($\cos\theta$) of an angle θ formed by said information progress vector and said terminal progress vector;

determining that said $\cos\theta$ is equal to or greater than a predetermined value; and

halting transmission of said information from said specific terminal when the decision is false.

2. The information transmission method according to claim 1, further comprising the step of:

transmitting said information from said specific terminal when the decision is true.

3. The information transmission method according to claim 1, wherein said information progress vector is calculated by the arbitrary use of two or more kinds of positional information selected from among positional information for said transmission source terminal included in said

information, positional information for other terminals, excluding said transmission source terminal, where information is relayed, and positional information obtained by said specific terminal; and wherein said terminal progress vector is calculated by using current and past positional information obtained by said specific terminal.

4. The information transmission method according to claim 3, wherein said positional information is obtained by a first method whereby positional information for a base station is obtained by a terminal that is controlled by said base station, and is used as said positional information of said terminal, or a second method for using a GPS (Global Positioning System).

5. The information transmission method according to claim 1, wherein said predetermined value is 0.

6. The information transmission method according to claim 1, wherein density information for a terminal is obtained, and when the relationship $s < |x - d|$ is established for a distance s between said specific terminal and a terminal that transmits information to said specific terminal, a communication limit distance x that is reached by a radio signal sent by said terminal, and an average inter-terminal distance d , the transmission of said information is inhibited.

7. The information transmission method according to claim

6, further comprising the steps of:

requesting the transmission of positional information by other terminals;

receiving said positional information from said other terminals; and

calculating an inter-terminal distance by using said positional information of said specific terminal and said positional information for said other terminals, and calculating the average of said inter-terminal distances and obtaining said distance d.

8. An information transmission system, wherein multiple terminals, including means for obtaining a location and means for exchanging information by radio, are provided, and wherein one of said terminals receives information from one of the remaining terminals and forwards said information to another terminal, comprising:

means for calculating an information progress vector that represents the progress of information;

means for calculating a terminal progress vector that represents the travel performed by a specific terminal among said multiple terminals;

means for calculating cosine ($\cos\theta$) of an angle θ formed by said information progress vector and said terminal progress vector;

means for determining that said $\cos\theta$ is equal to or greater than a predetermined value; and

means for halting transmission of said information from said specific terminal when the decision is false.

9. The information transmission system according to claim 8, further comprising:

means for transmitting said information from said specific terminal when the decision is true.

10. The information transmission system according to claim 8, further comprising:

means for calculating said information progress vector by the arbitrary use of two or more kinds of positional information selected from among positional information for said transmission source terminal included in said information, positional information for other terminals, excluding said transmission source terminal, where information is relayed, and positional information obtained by said specific terminal; and

means for calculating said terminal progress vector by using current and past positional information obtained by said specific terminal.

11. The information transmission system according to claim 10, further comprising: either means of first means for obtaining positional information for a base station at a terminal that is controlled by said base station, and for using said positional information of said base station as said positional information of said terminal, or a second means for using a GPS (Global Positioning System).

12. The information transmission system according to claim

8, wherein said predetermined value is 0.

13. The information transmission system according to claim 8, further comprising:

means for obtaining density information for a terminal;
and

means for inhibiting the transmission of said information when the relationship $s < |x - d|$ is established for a distance s between said specific terminal and a terminal that transmits information to said specific terminal, a communication limit distance x that is reached by a radio signal sent by said terminal, and an average inter-terminal distance d .

14. The information transmission system according to claim 13, further comprising:

means for requesting the transmission of positional information by other terminals;

means for receiving said positional information from said other terminals; and

means for calculating an inter-terminal distance by using said positional information of said specific terminal and said positional information for said other terminals, and calculating the average of said inter-terminal distances and obtaining said distance d .

15. An information terminal, including means for obtaining a location and means for exchanging information by radio comprising:

means for calculating an information progress vector that represents the progress of information;

means for calculating a terminal progress vector that represents the travel performed by a specific terminal among said multiple terminals;

means for calculating cosine ($\cos\theta$) of an angle θ formed by said information progress vector and said terminal progress vector;

means for determining that said $\cos\theta$ is equal to or greater than a predetermined value; and

means for halting transmission of said information from said specific terminal when the decision is false.

16. The information terminal according to claim 15, further comprising:

means for transmitting said information when the decision is true.

17. The information terminal according to claim 15, further comprising:

means for calculating said information progress vector by the arbitrary use of two or more kinds of positional information selected from among positional information for said transmission source terminal included in said information, positional information for other terminals, excluding said transmission source terminal, where information is relayed, and positional information obtained by said information terminal; and

means for calculating said terminal progress vector by

using current and past positional information obtained by said information terminal.

18. The information terminal according to claim 15, wherein said predetermined value is 0.

19. The information terminal according to claim 15, further comprising:

means for requesting the transmission of positional information by other terminals;

means for receiving said positional information from said other terminals;

means for calculating an inter-terminal distance by using said positional information of said information terminal and said positional information for said other terminals, and calculating the average of said inter-terminal distances and obtaining the average inter-terminal distance d ; and

means for inhibiting the transmission of said information when the relationship $s < |x - d|$ is established for a distance s between said information terminal and a terminal that transmits information to said information terminal, a communication limit distance x that is reached by a radio signal sent by said terminal, and an average inter-terminal distance d .

20. An information recording medium for storing a program code for receiving information from a terminal and forwarding said information to another terminal, said

program code comprising:

a program code for calculating an information progress vector that represents the progress of information;

a program code for calculating a terminal progress vector that represents the travel performed by said information terminal among said multiple terminals;

a program code for calculating cosine ($\cos\theta$) of an angle θ formed by said information progress vector and said terminal progress vector;

a program code for determining that said $\cos\theta$ is equal to or greater than a predetermined value; and

a program code for transmitting said information when the decision is true and for halting transmission of said information when the decision is false.